

REMARKS

The Examiner is thanked for the thorough examination and search of the subject patent application.

Claims 15, 17, 27 and 30 are pending. Claims 15, 17, 27 and 30 are currently amended. Claims 1-14, 16, 18-26, 28-29, and 31-32 have been canceled.

Response to Claim Rejections under 35 U.S.C. 102

Applicants respectfully traverse the rejections for at least the reasons set forth below.

Response to Claims 15 and 17

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As currently amended, independent claim 15 is recited below:

15. A method for fabricating a semiconductor wafer with a patterned contact point comprising gold, comprising:
ion milling said patterned contact point for cleaning said patterned contact point.

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Reconsideration of the rejection of Claims 15 and 17 rejected under 35 U.S.C. 102(b) as being anticipated by Tsukamoto et al. (U.S. Pat. 5,554,859) is requested based on the following paragraph.

Applicants respectfully assert that the method claimed in claim 15 patentably distinguishes over the citation by Tsukamoto et al. (US5,554,859).

Tsukamoto et al. teach a method for a semiconductor wafer comprising forming a gold film, patterning the gold film using a lithography process, and etching the gold film to a desired shape by Ar ion milling. ~ See Fig. 3B and col. 19, lines 17-23 ~

Tsukamoto et al. teach Ar ion milling process is used for etching a gold film to a desired shape, but not for cleaning a patterned contact point. Tsukamoto et al. fail to teach, hint or suggest that a patterned contact point could be ion milled for cleaning the patterned contact point, as claimed in claim 15. As a result, withdrawal of rejection under 35 U.S.C. 102 (b) is respectfully requested.

For at least the foregoing reasons, applicants respectfully submit independent claim 15 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claim 17 patently define over the prior art as well.

Response to Claims 27 and 30

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As currently amended, independent claim 27 is recited below:

27. A method for fabricating a semiconductor wafer, comprising:
 depositing a patterned metal bump on a topmost patterned circuit layer of said semiconductor wafer, wherein said patterned metal bump has a substantially flat top surface;
and

ion milling said patterned metal bump for cleaning said metal bump.

Reconsideration of the rejection of Claims 27 and 30 rejected under 35 U.S.C. 102(b) as being anticipated by Tsukamoto et al. (U.S. Pat. 5,554,859) is requested based on the following paragraph.

Applicants respectfully assert that the method claimed in claim 27 patentably distinguishes over the citation by Tsukamoto et al. (US5,554,859).

Tsukamoto et al. teach a method for a semiconductor wafer comprising forming a gold film, patterning the gold film using a lithography process, and etching the gold film to a desired shape by Ar ion milling. ~ See Fig. 3B and col. 19, lines 17-23 ~

Tsukamoto et al. teach Ar ion milling process is used for etching a metal film to a desired shape, but not for cleaning a patterned metal bump. Tsukamoto et al. fail to teach, hint or suggest that a patterned bump could be ion milled for cleaning the metal bump, as claimed in claim 27. As a result, withdrawal of rejection under 35 U.S.C. 102 (b) is respectfully requested.

For at least the foregoing reasons, applicants respectfully submit independent claim 27 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claim 30 patentably define over the prior art as well.

CONCLUSION

Some or all of the pending claims are now believed to be in condition for allowance. Accordingly, allowance of the claims and of the application as a whole is respectfully requested.

It is requested that should the Examiner not find that the Claims are now Allowable that the Examiner call the undersigned at 845-452-5863 to overcome any problems preventing allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'SBA', with a long horizontal flourish extending to the right.

Stephen B. Ackerman, Reg. No. 37,761